

96TH CONGRESS
2d Session

HOUSE OF REPRESENTATIVES

REPT. 96-
1100 Part II

WEST VALLEY DEMONSTRATION PROJECT ACT

SEPTEMBER 15, 1980.—Ordered to be printed

Mr. STAGGERS, from the Committee on Interstate and Foreign
Commerce, submitted the following

REPORT
together with
SUPPLEMENTAL VIEWS

COMPLETED
ORIGINAL

[To accompany H.R. 6865 which on March 19, 1980, was referred jointly to the Committee on Interstate and Foreign Commerce, the Committee on Interior and Insular Affairs, and the Committee on Science and Technology.]

[Including Cost Estimate of the Congressional Budget Office]

The Committee on Interstate and Foreign Commerce, to whom was referred the bill (H.R. 6865) to authorize the Department of Energy to carry out a high-level liquid nuclear waste management demonstration project at the Western New York Service Center in West Valley, N.Y., have considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

The amendment is as follows:

Strike out all after the enacting clause and insert in lieu thereof the following:

SECTION 1. This Act may be cited as the "West Valley Demonstration Project Act".

SAC. 2. (a) The Secretary shall carry out, in accordance with this Act, a high level radioactive waste management demonstration project at the Western New York Service Center in West Valley, New York, for the purpose of demonstrating solidification techniques which can be used for preparing high level radioactive waste for disposal. Under the project the Secretary shall carry out the following activities:

- (1) The Secretary shall solidify, in a form suitable for transportation and disposal, the high level radioactive waste at the Center by vitrification or by such other technology as the Secretary may, in his discretion, prescribe.
- (2) The Secretary shall develop containers suitable for the permanent disposal of the high level radioactive waste solidified at the Center.
- (3) The Secretary shall, as soon as feasible, transport, in accordance with applicable provisions of law, the waste solidified at the Center to an appropriate Federal repository for permanent disposal.
- (4) The Secretary shall, in accordance with applicable licensing requirements, dispose of low level radioactive waste and transuranic waste produced by the solidification of the high level radioactive waste under the project.
- (5) The Secretary shall decontaminate and decommission—
 - (A) the tanks and other facilities of the Center in which the high level radioactive waste solidified under the project was stored,
 - (B) the facilities used in the solidification of the waste, and
 - (C) any material and hardware used in connection with the project,
 in accordance with such requirements as the Commission may prescribe.
- (b) Before undertaking the project and during the fiscal year ending September 30, 1981, the Secretary shall carry out the following:
 - (1) The Secretary shall hold in the vicinity of the Center public hearings to inform the residents of the area in which the Center is located of the activities ~~proposed to be~~ undertaken under the project and to receive their comments on the project.
 - (2) The Secretary shall consider the various technologies available for the solidification and handling of high level radioactive waste taking into account the unique characteristics of such waste at the Center.
 - (3) The Secretary shall—
 - (A) undertake detailed engineering and cost estimates for the project,
 - (B) prepare a plan for the safe removal of the high level radioactive waste at the Center for the purposes of solidification and include in the plan provisions respecting the safe breaching of the tanks in which the waste is stored, operating equipment to accomplish the removal, and eluting techniques,
 - (C) conduct appropriate safety analyses of the project, and
 - (D) prepare required environmental impact analyses of the project.
 - (4) The Secretary shall enter into a cooperative agreement with the State in accordance with the Federal Grant and Cooperative Agreement Act of 1977 under which the State will carry out the following:
 - (A) The State will make available to the Secretary the facilities of the Center and the high level radioactive waste at the Center which are necessary for the completion of the project. The facilities and the waste shall be made available without the transfer of title and for such period as may be required for completion of the project.
 - (B) The Secretary shall provide technical assistance in securing required license amendments.
 - (C) The State shall pay 10 per centum of the costs of the project, as determined by the Secretary. The State may not use Federal funds to pay its share of the cost of the project, but may use the perpetual care fund to pay such share.
- (c) Within one year from the date of the enactment of this Act, the Secretary shall enter into an agreement with the Commission to establish arrangements for review and consultation by the Commission with respect to the project. The agreement shall provide for the following:
 - (1) The Secretary shall submit to the Commission, for its review and comment, a plan for the solidification of the high level radioactive waste at the Center, the removal of the waste for purposes of its solidification, the preparation of the waste for disposal, and the decontamination of the facilities to be used in solidifying the waste. In preparing its comments on the plan, the Commission shall specify with precision its objections to any provision of the plan. Upon submission of a plan to the Commission, the Secretary shall publish a notice in the Federal Register of the submission of the plan and of its availability for public inspection, and, upon receipt of the comments of the Commission respecting a plan, the Secretary shall publish a notice in the Federal Register of the receipt of the comments and of the availability of the comments for public inspection. If the Secretary does not revise the plan to meet objections specified in the comments of the Commission, the Secretary shall publish in the Federal Register a detailed statement for not so revising the plan.

(2) The Secretary shall consult with the Commission with respect to the form in which the high level radioactive waste at the Center shall be solidified and the containers to be used in the permanent disposal of such waste.

(3) The Secretary shall submit to the Commission safety analysis reports and such other information as the Commission may require to identify any danger to the public health and safety which may be presented by the project.

(4) The Secretary shall afford the Commission access to the Center to enable the Commission to monitor the activities under the project for the purpose of assuring the public health and safety.

(d) In carrying out the project, the Secretary shall consult with the Administrator of the Environmental Protection Agency, the Secretary of Transportation, the Director of the Geological Survey, and the commercial operator of the Center.

(e)(1) If the Commission determines that any activity of the Secretary under the project or the failure of the Secretary to take specified actions under the project presents a danger to the public health and safety, the Commission shall issue an order directing the Secretary to cease such activity or to take such actions, and if the Commission determines that any activity proposed to be undertaken by the Secretary under the project may present a danger to the public health and safety, the Commission shall issue an order directing the Secretary to not undertake such activity.

(2) If the Commission issues an order under paragraph (1), it shall publish the order in the Federal Register, give notice of a public hearing on the order, and, as soon as practicable, hold such hearing. Upon completion of the hearing, the Commission shall affirm, revise, or rescind, as appropriate, the order with respect to which the hearing was held.

(3) The Secretary may not conduct any activity which is prohibited by an order of the Commission in effect under this subsection and shall take such actions as may be required by an order in effect under this subsection.

SEC. 3. (a) There are authorized to be appropriated to the Secretary for the project not more than \$5,000,000 for the fiscal year ending September 30, 1981.

(b) The total amount obligated for the project by the Secretary shall be 90 per centum of the costs of the project.

(c) The authority of the Secretary to enter into contracts under this Act shall be effective for any fiscal year only to such extent or in such amounts as are provided in advance by appropriation Acts.

SEC. 4. Not later than February 1, 1981, and on February 1 of each calendar year thereafter during the term of the project, the Secretary shall transmit to the Speaker of the House of Representatives and the President pro tempore of the Senate an up-to-date report containing a detailed description of the activities of the Secretary in carrying out the project, including agreements entered into and the costs incurred during the period reported on and the activities to be undertaken in the next fiscal year and the estimated costs thereof.

SEC. 5. (a) Other than the costs and responsibilities established by this Act for the project, nothing in this Act shall be construed as affecting any rights, obligations, or liabilities of the commercial operator of the Center, the State, or any person, as is appropriate, arising under the Atomic Energy Act of 1954 or under any other law, contract, or agreement for the operation, maintenance, or decontamination of any facility or property at the Center or for any wastes at the Center. Nothing in this Act shall be construed as affecting any applicable licensing requirement of the Atomic Energy Act of 1954 or the Energy Reorganization Act of 1974. This Act shall not apply or be extended to any facility or property at the Center which is not used in conducting the project.

(b) This Act does not authorize the Federal Government to acquire title to any high level radioactive waste at the Center or to the Center or any portion thereof.

SEC. 6. Within one year from the date of the enactment of this Act the Attorney General of the United States shall complete a study to determine the identity of, and the legal responsibility which, any person, other than the United States or the State, may have under any law or rule of law for the decontamination and decommissioning of the Western New York Service Center in West Valley, New York. The study shall be conducted without regard to the project prescribed by section 2(a). The Attorney General shall publish the results of such study, and provide copies thereof to the Congress, as promptly as practicable following the date of the completion of the study. The Attorney General, based on such study, shall, to the extent he deems it appropriate and in the public interest, take such action under any provision of law to require payment by such person of all or any part of the costs incurred by the United States under the project for decontamination and decommissioning.

SEC. 7. For purposes of this Act:

(1) The term "Secretary" means the Secretary of Energy.

- (2) The term "Commission" means the Nuclear Regulatory Commission.
- (3) The term "State" means the State of New York.
- (4) The term "high level radioactive waste" means the high level radioactive waste which was produced by the reprocessing at the Center of spent nuclear fuel. Such term includes both liquid wastes which are produced directly in reprocessing, dry solid material derived from such liquid waste, and such other material as the Commission designates as high level radioactive waste for purposes of protecting the public health and safety.
- (5) The term "transuranic waste" means material contaminated with elements which have an atomic number greater than 92, including neptunium, plutonium, americium, and curium, which have a half life greater than 5 years, and which are in concentrations greater than 10 nanocuries per gram, or in such other concentrations as the Commission may prescribe to protect the public health and safety.
- (6) The term "low level radioactive waste" means radioactive waste not classified as high level radioactive waste, transuranic waste, or byproduct material as defined in section 11 e. (2) of the Atomic Energy Act of 1954.
- (7) The term "project" means the project prescribed by section 2(a).
- (8) The term "Center" means the Western New York Service Center in West Valley, New York.

PURPOSE OF THE BILL

The purpose of the bill is to authorize the Department of Energy to carry out a high level liquid nuclear waste management demonstration project at the Western New York Nuclear Service Center in West Valley, New York.

LEGISLATIVE BACKGROUND

On March 19, 1980, the Honorable Stanley N. Lundine introduced H.R. 6865, which was referred jointly to the Committees on Interstate and Foreign Commerce, Interior and Insular Affairs and Science and Technology.

On June 18, 1980, the Committee on Science and Technology reported the bill with amendments.

COMMITTEE ACTION

On March 19, 1980, the bill, H.R. 6865, was introduced by the Honorable Stanley N. Lundine, and was referred jointly to the Committees on Interstate and Foreign Commerce, Interior and Insular Affairs and Science and Technology.

On July 28, 1980, the Subcommittee on Energy and Power conducted a hearing on the bill. On August 19, 1980, the Subcommittee considered the bill and ordered it reported to the Committee, as amended, by voice vote. On August 27, 1980, the Interstate and Foreign Commerce Committee met in open session and considered the bill. Then, a quorum being present, the Committee by voice vote ordered the bill reported with an amendment.

The Committee hearings on this legislation are discussed *infra* at the section entitled "Committee Hearings".

SUMMARY OF H.R. 6865

H.R. 6865 authorized the Secretary of Energy to establish a high-level radioactive liquid waste solidification project at the Western New York Service Center in West Valley, New York. Under the program, the Secretary is to solidify, in a form suitable for transportation and disposal, the high-level liquid radioactive waste

which presently exists at the Center. The project is to include the development of containers suitable for the permanent disposal of the solidified waste, and the transportation of the waste from the site to an appropriate Federal repository. Furthermore, the Secretary, subject to such requirements as the Nuclear Regulatory Commission may prescribe, is to decontaminate and decommission all the facility's equipment, hardware and materials used in the course of the project. Before initiating the project, the Secretary is required to hold public hearings in the vicinity of the Center in order to inform residents of the area of the purpose of the activities which would be undertaken at the site. During the course of the fiscal year ending September 30, 1981, the Secretary is to develop a plan establishing the cost of and the methods for conducting the program authorized by this Act.

The Secretary is directed to enter into a cooperative agreement under the provisions of the Federal Grant and Cooperative Agreement Act of 1977 with the State of New York whereby the State will agree to make available to the Secretary the facilities and high-level radioactive waste at the Center which are necessary for the completion of the project. The facilities and the waste are to be made available without the transfer of title to the facility or the waste. The agreement is also to provide that the Secretary will make available technical assistance to the State in securing the required license amendments. Finally, the agreement is to provide that the State will pay 10 percent of the cost of the project as determined by the Secretary. In determining the cost of the project, the Secretary is authorized to consider the value of the use of the Center for the project.

The Secretary is directed to enter into an agreement with the Nuclear Regulatory Commission to establish procedures by which the Commission will review and be consulted regarding the activities of the Secretary relating to the project. Specifically, the Secretary is required to submit to the Commission for its review and comment a plan for the solidification of high-level radioactive waste at the Center. The Commission is given the authority to specify with precision its objections to any provision of the plan. The Secretary is required to publish in the Federal Register a detailed statement for not accepting any provision in the Commission's comments. The Secretary is also to consult with the Commission regarding the form in which the high-level radioactive waste will be solidified and the containers to be used in the permanent disposal of the waste. The agreement is also to include a provision under which the Secretary will submit to the Commission safety analysis reports and any other information the Commission may require. Finally, the agreement is to insure that the Secretary afford the Commission access to the Center at all times.

The Secretary is required to transmit to the Congress annual reports on the project. Nothing in the Act is to be construed as affecting any rights, obligations, or liabilities of the commercial operator of the Center, the State, or any person, as is appropriate, arising under the Atomic Energy Act of 1954, or any law, contract, or agreement for the operation, maintenance, decommissioning of any facility or property at the Center. The bill also states that nothing in the Act shall be construed as affecting any applicable licensing requirements of the Atomic Energy Act of 1954 or the Energy Re-

organization Act of 1974. Nothing in the Act is to be construed as authorizing the Federal government to acquire title to any high-level radioactive waste at the Center, or to the Center itself, or any portion thereof. The Attorney General of the United States is directed to conduct a study of the potential liability of any person, other than the State of New York regarding the responsibility for the present status of the waste at the site and to submit a report to the Congress within one year of the date of enactment. If the Attorney General deems it appropriate, he is authorized to initiate a suit on behalf of the United States to recover any cost incurred by the United States which would be the responsibility of another party. The bill authorizes \$5 million for fiscal year 1981.

COMMITTEE HEARINGS

Committee consideration

On Monday, July 28, 1980, the Subcommittee on Energy and Power held a hearing on H.R. 6865. The first witness to appear before the Subcommittee was the sponsor of the bill, the Honorable Stanley N. Lundine. Congressman Lundine discussed the extensive past Federal involvement in the initiation and operation of the West Valley site, and pointed out that almost 70 percent of the waste were produced as the result of Federal contracts. This past Federal involvement, he asserted, made West Valley a unique situation. "It does not", he stated, "build on or create any precedence that would be applicable in other situations." The Congressman went on to say that West Valley "has borne more than its fair share of the problems associated with the nuclear program in this country . . . and represents a challenge to this country reflective of the broader nuclear waste management problems awaiting us."

The next witness was the Honorable Hugh Carey, Governor of the State of New York. Governor Carey stressed the contribution that the West Valley project could make towards the establishment of a comprehensive nuclear waste program. The United States, he asserted, has never demonstrated that solidification of alkaline waste on a scale proposed for West Valley. The State of New York, he stated, was willing to meet its responsibilities and play an appropriate role, including cost sharing. But, he argued, "We cannot carry this alone. It was never contemplated by any of the parties, including the United States, that the State alone would bear the cost and burdens of the failure of this risky venture. Clearly, overall support, direction and management responsibility must be housed with the only original partner—the Federal government—capable of caring and managing a successful demonstration." Governor Carey stressed the dangers of delaying the project by saying that "While the wastes at West Valley, including the liquid waste . . . appear to be secure at the present, posing no immediate threat to the health and safety, I nevertheless feel a strong sense of urgency. The right time to initiate an immobilization project for that waste is now before we are faced with a crisis. Like Mount St. Helens, we cannot know when the present status would change." The Governor stressed that the tanks could deteriorate and leak and that waste in liquid form offers a far more serious potential for dispersal into the environment.

The design life of the West Valley tanks, the Governor noted, is forty years, and they have been filled for ten years or more. The project will take at least ten years to complete. It is, he stressed, clearly not too early to act. The ten years since AEC policy pronouncement that liquid wastes should be solidified has been an adequate period of time for study and deliberation, and now is the time to act. The Governor was asked if the State intended to request any assistance from the Federal government regarding other waste at the site. In response, the Governor stated, "That is not the subject of the legislation and it is not now our contemplation the State will be asking for Federal help in that regard."

The next witness was J. Dexter Peach, Director, Energy and Minerals Division, General Accounting Office. In a report requested by the Subcommittee On Energy and Power entitled Status of Efforts to Clean Up the Shut-Down Western New York Nuclear Service Center, (EMD-80-60, issued June 6, 1980), the General Accounting Office urged that the most practical solution to the West Valley question should involve a cooperative program between the Federal government and the State of New York designed to deal with the full range of waste management concerns present at West Valley. The GAO recognized that solid wastes are safer to store and, because of this, urged that a program to convert the existing liquid wastes into a final form should begin now. The GAO stated that such a program be viewed from both a national and state point of view and that a Federal-State effort would provide a mutually beneficial solution. Mr. Peach said, "We believe that the Federal government should pay a part of the cleanup cost for West Valley because it encouraged the initial development of the site, took steps to increase the operating costs through increased safety requirements, and then indefinitely deferred commercial reprocessing through the national policy decision." However, the GAO went on to recommend that in return the State should agree to reopen the fuel storage facility at West Valley if it is found to be technically adequate because the State and surrounding states have a near term need for spent fuel storage. The GAO also recommended that the State should agree to reopen the low-level waste burial ground, recognizing that New York is one of the largest generators of low-level waste and that neither it nor the entire northeastern quarter of the United States has an operating low-level commercial waste burial site.

The GAO went on to state that "In our view, the proposed project at West Valley should more logically be described as a remedial action program with some demonstration value than as a demonstration project where they have full Federal support. While dealing with West Valley's high-level liquid waste may help build public confidence of how commercial high-level liquid waste can be permanently disposed of, the technical demonstration benefits of this project are limited."

The Nuclear Regulatory Commission witnesses testified in support of the bill from the standpoint of public health and safety. Mr. William J. Dircks, the Director of the Nuclear Regulatory Commission's Office of Nuclear Materials and Safeguards urged that the bill clarify the Nuclear Regulatory Commission's role:

NRC's regulations permit us to act upon virtually any conceivable project proposed by the commercial nuclear

sector. . . . The present language of Congressman Lundine's proposed bill requires that the Department of Energy consult with the NRC in carrying out this project. Our understanding of the word "consult" means that the Department must submit safety analysis reports for independent review and evaluation and provide such information as we may require. In addition, we interpret the word "consult" to mean that the Department must take some sort of action based upon our comments and recommendations. They should either accommodate our comments or explain why any such comments are not accommodated. Furthermore, all documentation associated with submittals by the Department of Energy and the evaluations by the NRC would be available in the public record. Finally, we interpret the word "consult" to mean that the NRC would not issue the license to DOE. Any hearings regarding the solidification process itself would not be NRC hearings. We suggest that the Committee consider the issue of NRC's role in this project and the preparation of the Committee's report on this bill. The Commission feels some clarification of the NRC's role is necessary and that it may be appropriate for the Committee to state in the report the Congressional intent of the NRC's consultative role.

Director Dircks went on to state that:

If the Department of Energy chooses to solidify the waste in final form suitable for emplacement in the repository, then this form must meet our developing regulation, 10 CFR, Part 60. The final regulatory aspect that needs mentioning is the fact that the West Valley facility is currently licensed pursuant to 10 CFR, Part 50, of our regulations. As a minimal, even if the Department were to take over the entire facility, the NRC would have to take some sort of action to terminate, modify, or amend the existing license. Findings regarding public health and safety would be an integral part of the termination action. However, the scope of our analysis to make such findings is not clear at this time because we do not know the extent to which the DOE will assume responsibility for the site.

Ralph W. Deuster, President, Nuclear Fuel Services, Incorporated, testified on behalf of the commercial operator of the facility. In his statement Mr. Deuster stated that approximately 625 metric tons of spent fuel were reprocessed at West Valley, of which approximately 480 metric tons, or 75 percent, was processed under the baseload contract with the Atomic Energy Commission. Of that amount, approximately 380 tons, or 60 percent, was government-owned fuel. Even though the remainder of the spent fuel was reprocessed under commercial contracts, Mr. Deuster pointed out that it was spent fuel that the Federal government had previously obligated itself to reprocess. Thus, he asserted all the spent fuel reprocessed at West Valley was carried out either directly or indirectly on behalf of the Federal government.

C. Worthington Bateman, Acting Under Secretary of the Department of Energy, appeared on behalf of the Department. Dr. Bateman asserted that the Federal responsibility for this program de-

rived from its interest in promoting and commercializing the nuclear fuel sector a number of years ago. In the Department's view, he stated, the condition of the waste did not impose an immediate health and safety hazard, but the problem must be considered as serious and requiring attention now as opposed to some indefinite time in the future. The program, he stated, does offer some substantial benefits to the Department and to its waste management program from the research and development perspective. But, he said "... from the Department's view as well as from the residents in the area and the citizens in the State of New York, the project clearly has a remedial action element which is undeniable." With respect to the ability of the Department to take title to all or part of this site for the purposes of storing spent fuel away from reactors, Dr. Bateman stated "We simply don't have that authority." When asked if the Department had any information which would indicate any further requirements for activities by the Federal government in connection with either of the two burial grounds located at the site in the area, Dr. Bateman stated "No sir."

The Department of Energy witnesses noted that the activities encompassed by this bill may create problems regarding any use of the spent fuel storage facilities at the site. The Department's witnesses noted that during the demonstration phase, people would be working with high-level waste in the same building as the spent fuel storage facility, and, as a result, there could be work interference. Consequently, during the course of the program authorized by this legislation, it would be difficult, in the Department's view, for the spent fuel storage facilities to be used, and it was the Department's preference that they not be used.

The last witness to appear before the Subcommittee was Dr. Marvin Resnikoff, Co-Director of the Sierra Club Radioactive Waste Campaign. On behalf of the Sierra Club Dr. Resnikoff stated that the Sierra Club strongly supports the solidification of the high-level liquid waste at West Valley on the basis of the public health and safety. While supporting the solidification project, however, Dr. Resnikoff opposed relating the providing of financial assistance for the project to any conditions regarding the use of the low-level burial grounds because he believed that their present condition did not make them suitable for such use.

BACKGROUND AND NEED

The Western New York Nuclear Service Center site is owned by the State of New York and was established in the early 1960's as a part of a program which was designed to attract industries to the area, especially those in the then developing atomic energy field, in the hope that such industries would increase employment opportunities and to expand the tax base.

In 1959 the State of New York established the Office of Atomic Development (OAD) which was to coordinate the state's nuclear regulatory and developmental programs. In 1961 OAD acquired the West Valley site through condemnation, and established the Western New York Nuclear Service Center for the purpose of storing nuclear fuels and radioactive waste with the intention that it subsequently would be expanded to related industrial development.

Prior to the establishment of the West Valley site, the Atomic Energy Commission had offered to make available to the commercial sector reprocessing technologies which had been used in the defense program. The Davidson Chemical Company was interested in utilizing this technology for the commercial reprocessing of spent fuel and established the Nuclear Fuel Services, Inc. which was owned by W. R. Grace Company and American Machine and Foundry. In a proposal to the Atomic Energy Commission, Nuclear Fuel Services, Inc. indicated a willingness to provide and maintain storage for a limited period of time for the high-level liquid waste resulting from the reprocessing operations, with the provision that the waste would ultimately become the responsibility of the Atomic Energy Commission. NFS also stated that it was willing to collect and return to the Atomic Energy Commission a sum calculated to provide the estimated full cost for perpetual storage at the point of turnover. NFS was simultaneously negotiating with the State of New York to make the State responsible for the perpetual care of the waste. It was subsequently agreed that the method of waste disposal would be to store the waste in liquid form in underground storage tanks, which was similar to the method being used at Atomic Energy Commission production facilities.

In order to encourage the construction and operation of commercial nuclear fuel reprocessing plants and to provide some economic incentive to the developing industry, the Atomic Energy Commission agreed to provide Nuclear Fuel Services with sufficient fuel from defense reactors to support the first five years of reprocessing operations at the site. This was necessary because the commercial sector was not producing sufficient quantities of spent fuel to support the operations of the facility. NFS also entered into agreements with the New York Atomic Research and Development Authority (NYARDA), which had replaced the OAD, that provided for the lease of the WNYNSC. NFS also negotiated a contract which provided that NFS would build storage facilities for nuclear fuel and radioactive waste at the site and separate waste storage agreement which provided the terms for NFS to maintain the waste for a set period of time, limited by the duration of the lease, thereafter turning the waste over to the NYARDA along with the fund for perpetual care. New York State through NYARDA provided assurance (as amendment No. 1 to the application for a license from the Atomic Energy Commission) to the Federal government that the State would be responsible for the waste in perpetuity.

In May 1963, the Atomic Energy Commission issued a permit authorizing construction of the Nuclear Fuel Services plant. Construction was completed in 1966, and on April 19 of that year, the Atomic Energy Commission issued a license to Nuclear Fuel Services, Inc. for the operation of the first commercial nuclear fuel reprocessing plant in the United States.

On November 14, 1970, the Atomic Energy Commission amended its regulations (10 CFR 50, Appendix F) to require that high-level liquid waste generated at licensed fuel reprocessing facilities be solidified within five years after separation and shipped to a federal repository within ten years after separation. The existing NFS waste was specifically exempted from these regulations pending a future rulemaking proceeding by the Atomic Energy Commission. The successor to the AEC, the Nuclear Regulatory Commission, has

not completed its rulemaking on this issue. From 1966 to 1972, about 642 metric tonnes of nuclear fuel were reprocessed at the WNYNSC. Approximately 380 metric tonnes of AEC's production reactor and 100 metric tonnes of commercial reactor fuel were supplied under the base load contract. The remainder was supplied directly to Nuclear Fuel Services by public utilities. In 1972, the plant was shut down to expand its capabilities and to make modifications to reduce radioactive influence and radiation exposure levels to plant personnel. At the time, NFS estimated this modification program would cost about \$15 million and take two years to complete.

The proposed modification program involved a significant alteration of a licensed facility, as determined by the Atomic Energy Commission, and therefore, required complete licensing review. Because the regulatory requirements had substantially improved since the initial plant was constructed, the Atomic Energy Commission stipulated that new facilities must be capable of meeting new regulatory requirements; the most difficult of these related to seismic requirements. The AEC also requested that Nuclear Fuel Services assess the capability of the existing structures to withstand natural phenomena. By 1976, NFS judged that over \$600 million would be required to complete the proposed modification program if these and other criteria, actively being considered at the time, were imposed. In April 1976, NFS notified the New York State Energy Research and Development Authority, the successor to NYARDA, of its intention to exercise its rights under the waste storage agreement and to surrender the responsibility for all waste at the WNYNSC to NYSERDA. On September 22, 1976, NFS announced its decision to withdraw from the nuclear fuel reprocessing business, citing rising costs and uncertain regulatory requirements as key factors. On November 30, 1976, NYSERDA advised the federal government that ownership of the WNYNSC and responsibility for its contents should, in their opinion, be transferred to the U.S. Energy Research and Development Administration.

When the plant was operating, Nuclear Fuel Services received spent fuel encased in tubular metal rods from the Atomic Energy Commission and from utilities which were placed in storage pools until needed. The first step was to mechanically chop the spent fuel rods into two inch pieces in order to expose the pellets of fuel contained inside. The pellets were then dissolved in nitric acid, leaving the chopped hulls as undissolved waste.

The dissolved solution was chemically processed to separate the uranium and plutonium from other fission products, then the separated uranium and plutonium were purified, concentrated through evaporation, and sent to storage tanks for subsequent packing and shipping.

The acid waste from the separation and extraction processes was then transferred to high-level waste evaporation to be concentrated, after which it was transferred to storage tanks. The waste at West Valley was neutralized with sodium hydroxide, in order to store the normally acidic high-level waste in a tank constructed with carbon steel. In retrospect, neutralizing the waste may have been unfortunate, since it created several serious problems.

For example, plutonium and strontium 90 are insoluble in the neutralized waste and eventually settle in a sludge at the bottom of

the storage tanks. Removing the sludge from the storage tank is currently the most difficult technological problem.

Additionally, the neutralized waste requires further treatment to produce a more acceptable solid form of disposal. However, a technology to convert this waste to a suitable form for a long-term storage of disposal has only been demonstrated at a laboratory scale.

Description of the site

The existing facilities at the site include:

A. A spent fuel receiving storage facility which is currently operable and is filled to about two-thirds of capacity with 750 spent fuel assemblies.

B. A reprocessing plant encompassing approximately 80,000 square feet of floor space which is presently being maintained in a shutdown condition.

C. A high-level liquid waste storage facility consisting of two 750,000 gallon alkaline waste storage tanks, one containing about 560,000 gallons of high-level liquid waste and the other serving as a spare, two 15,000 gallon acidic waste storage tanks, one of which contains about 12,000 gallons of waste solution, with the other serving as a spare, and associated ventilation, surveillance and heat transfer systems. There is no indication that the tanks at NPS have ever leaked and their design life is for fifty years and corrosion sampling to date indicates that the corrosion levels are far below the designed allowance.

D. An NRC licensed high level waste burial ground consisting of approximately seven acres of the site and containing about 139,000 cubic feet of spent fuel hardware and other solid waste which are buried in up to fifty feet of soil. Also located in this burial ground are a number of ruptured fuel assemblies encased in concrete. This facility was licensed by the Atomic Energy Commission to accept waste generated from the reprocessing operation and is currently being used to dispose of the small amounts of waste generated at the plant.

A New York State licensed burial waste ground consisting of approximately 22 acres, containing about 2.4 million cubic feet of contaminated waste. About 23 percent of the wastes were generated at the reprocessing plant, with the remaining coming from schools, hospitals, pharmaceutical companies, research institutes, waste disposal companies, nuclear reactors and federal installations. Operation of these burial grounds ceased in 1975, primarily because of the overflow from some of the older trenches.

During the period of storage in the tanks, approximately 30,000 gallons of sludge has accumulated in the bottom of the tank, and it is estimated that all of the long-term fission products, such as strontium 90, and almost all of the transuranic elements, such as plutonium, have settled at the bottom. The most difficult problem will be the removal of this sludge. Efforts to remove sludge from defense waste at Hanford and Savannah River have been only partially successful, and the problem will be more difficult at West Valley because the waste tanks contain certain obstructions, such as latticed support structures at the bottom of the tank, which could impede removal. Moreover, the longer the sludge sits at the

bottom of the tank, the greater the probability that hardening will take place.

Although the Nuclear Regulatory Commission believes that the method of storing the waste at West Valley poses no immediate danger to the public health and safety, the Commission does not regard the storage of liquid high-level waste in tanks as constituting an acceptable method of long-term storage because of the long-term integrity of the tanks in which the waste is presently stored is uncertain.

There is general agreement that the liquid waste should be removed, although it is recognized that the removal of the waste in the sludge in the tanks at West Valley will be difficult because of the character of the sludge and because of the structural obstacles on the bottom of these tanks. The Department of Energy is presently considering a number of options which include: solidification to a final form for shipment to a final repository; solidification to immediate form suitable for off-site shipment for conversion to a final form; intank solidification for permanent disposal at West Valley; and continued storage as is, indefinitely, or until a repository has been decided on.

NEED FOR THE LEGISLATION

There are presently almost 600,000 gallons of liquid radioactive high-level waste stored in tanks at the West Valley site. Although the Nuclear Regulatory Commission believes that the method of storing the waste at West Valley poses no immediately danger to the public health and safety, the Commission does not regard the storage of liquid high-level radioactive waste in tanks as constituting an acceptable method for long-term storage because the long-term integrity of the tanks in which the waste is presently stored is uncertain. Thus, there is danger that the tanks may leak, and the longer the waste is stored in the tanks, the greater the danger. Moreover, over time, the liquid in the tank separates, and increasing amounts of sludge are accumulating at the bottom of the tanks. Efforts to remove sludge from defense waste tanks at the Hanford and Savannah River facilities have been only partly successful, and the problem will be more difficult at West Valley because the waste tanks contain certain obstructions, such as lattice support structures at the bottom of the tank, the greater the probability that hardening will take place, making removal even more difficult.

For some time now, the Federal government has been experimenting with various solidification technologies and handling techniques for dealing with liquid high-level radioactive waste. These, however, have been small scale demonstration programs and a large scale effort has never yet been attempted. These demonstration programs, however, do constitute a technical base for establishing a large program as envisioned by this legislation. The liquid waste at the West Valley site provides the government with an opportunity for proceeding with a full-scale project.

Although the Federal government would derive substantial benefit from proceeding with the project to solidify the waste at the West Valley site, the overriding concern of this Committee is directed towards the health and safety issues posed by the continued

storage of the high-level liquid radioactive waste at the present tanks. While the Committee recognizes the demonstration value of this program, it essentially considers the project to be a remedial action program design to convert the waste to a more acceptable form, in order to reduce the immediate danger to the public health and safety. Because of the remedial action aspects of this program, the Committee believes that the State of New York should make a contribution towards the cost of the program. Because of the benefits which will be derived from this program by the citizens of New York State, the Committee requires that the State provide 10 percent of the cost of this project.

The Committee recognizes that a substantial quantity of this waste was produced in the course of fulfilling contracts with the Atomic Energy Commission and that most of such contracts were related to the military program. Because of the extensive past Federal involvement, the Committee is willing to have the government pay 90 percent of the cost of the project. In view of the unique circumstances regarding the Federal government's past extensive involvement at the West Valley site, the Committee believes that it is a special situation, and does not intend that the share provided by the Federal government constitute precedent for any subsequent remedial actions which may be performed by the Federal government. An additional factor in determining the Federal government's contribution was the consideration of the substantial value of the program to the overall nuclear waste management program. Because of the value this project may have towards a long-term nuclear waste management program, and because of the concern over health and safety issues caused by the existing situation at the site, the Committee believes it is important that the project proceed expeditiously.

COMMITTEE COMMENTS

Nature of the program

For the past two years, the Committee on Science has reported an authorization bill for the Department of Energy which included a provision establishing a high-level radioactive waste solidification project at the Western New York Nuclear Service Center. Consistent with past practices, the staffs of the Committees on Science and Technology, Interior and Insular Affairs and Interstate and Foreign Commerce worked together to resolve differences in the Department of Energy's authorization bill as reported by each Committee regarding matters within the respective jurisdiction of the involved Committees. As the high-level radioactive waste solidification project was added as an amendment in the Committee on Science and Technology, this Committee had never previously considered the legislation, even though it involves substantial remedial action aspects. The introduction of what had previously been an amendment as a separate piece of legislation afforded this Committee the opportunity to consider the merits of the project in its proper context.

Although the bill, as introduced, reflects the results of prior negotiations among the Committee's staffs, this Committee, in the course of its consideration of the proposal, substantially revised the bill. This Committee believes that its amended version incorporates

substantial improvements which more narrowly define the scope of the project and which more equitably apportion the responsibilities for the cost of the project between the Federal government and the State of New York.

This Committee recognizes that the program authorized under this bill has an important demonstration value, in that past high-level liquid radioactive waste activities have been confined to small scale projects. Consequently, a program of the magnitude of the West Valley project has significant demonstration implications, expanding the waste solidification program beyond its present research and development stage. Moreover, the large scale demonstration of waste solidification technology has important implications for the establishment of a comprehensive national nuclear waste management program.

However, the basis for this Committee's action in reporting this bill was primarily directed towards the health and safety implications posed by the storage of high-level radioactive waste in a liquid form. While the Committee recognizes that the existence of the waste in the tanks poses no immediate danger, the Committee believes that continued storage of liquid waste is unacceptable and requires action. Consequently, this Committee views the project authorized by this legislation as essentially a remedial action program with substantial demonstration value, and that the bill, as reported by this Committee, reflects that belief. This is consistent with the views of the program as expressed by the representatives of the General Accounting Office in their testimony before the Subcommittee on Energy and Power.

Although this Committee believes that the project authorized by this legislation is essentially a remedial action program, the size of the Federal contribution to the project reflects this Committee's recognition that this is not a typical remedial action program and that the West Valley project is a unique situation, not simply because of the significant demonstration value of the project, but also because of the past extensive involvement of the Federal government in the development and operation of the reprocessing facility. Most of the reprocessing activities which occurred at the site were performed under contracts with the Atomic Energy Commission, and a majority of these were a part of the military, as opposed to the commercial, program. Because of this, and because of the benefits which will accrue to the Federal government as a result of demonstrating solidification technologies, this Committee has provided a greater Federal contribution than would normally be provided to a typical remedial action program.

Consequently, the Committee does not believe that the cost sharing formula contained in this legislation should serve as a precedent for any future remedial action programs regarding the disposal of radioactive waste or any other toxic or hazardous waste. This is consistent with the views expressed by the sponsor of this legislation in his testimony before the Subcommittee on Energy and Power.

In reporting a bill which establishes a program to solidify the high-level waste at West Valley, this Committee was aware that there are health and safety questions regarding other conditions at the site. Specifically, the condition of the low-level waste burial ground and the disposal of spent fuel in the NRC licensed burial

grounds are matters of major concern which could affect the public health and safety. In confining the program to the solidification of the high-level liquid radioactive waste, this Committee intends that the responsibility for monitoring, maintaining and correcting any additional public health and safety problems remain exclusively with the licensees. The Committee notes that nothing in the bill requires any corresponding action by the State of New York regarding the use of other portions of this site. The Committee is, however, aware that the site contains a licensed low-level burial ground which is currently not accepting additional quantities of waste. Additionally, there is also a facility on the site which is being used to store limited quantities of spent fuel. In its report to the Subcommittee on Energy and Power on West Valley, the General Accounting Office recommended the Federal assistance for the solidification of high-level waste be related to the potential reopening of the spent fuel and low-level waste facilities. The lack of a regional low-level waste burial ground in the northeast is a matter of great concern, and while the legislation does not specifically relate the availability of Federal assistance to the potential additional use of the site for meeting the low-level waste disposal or spent fuel storage needs at the State of New York, the Committee expects that the State will give serious consideration to this possibility, especially since the Committee anticipates that the low-level and transuranic contaminated waste generated in the course of the solidification project will be disposed at the site.

The Committee notes that in the course of its consideration of this legislation, the Senate adopted an amendment directing the Secretary of Energy to enter into a cooperative agreement with the State of New York pursuant to the "Federal Grant and Cooperative Agreement Act of 1977". This amendment included the requirement that the cooperative agreement provide for "demonstration of vitrification technology or technologies which can be replicated for other applications in the United States". Cooperative agreements under the Federal Grant Cooperative Agreement Act of 1977 relate to situations where the Federal government is providing services or funds to a state. By requiring that the cooperative agreement provide for the demonstration for solidification technologies, the affect of the amendment was that the Secretary of Energy would provide these services and funds to the State of New York. This would then consequently be a program administered by the State of New York, rather than the Secretary of Energy.

While the Committee believes that the State of New York will receive substantial benefit from this program, it views it as essentially a Federal program and, as such, the Committee believes that the program should be administered entirely by the Secretary of Energy and that he be responsible for making all decisions regarding the activities which will occur at the site.

The amendment also required that the cooperative agreement provide for "submission jointly by the Department of Energy and the State of New York of an application for a license amendment as soon as practicable with the Nuclear Regulatory Commission allowing for the demonstration". By requiring that the Secretary be a co-applicant for the license amendment, it places the Secretary in a unique position which may have legal consequences extending

beyond the scope of the program. Consequently, in the course of its consideration of this legislation, the Committee altered this requirement by authorizing the Secretary to provide technical assistance to the State in obtaining the needed license amendment.

SECTION-BY-SECTION ANALYSIS OF THE BILL

Section 1 states that the bill is to be cited as the "West Valley Demonstration Project Act".

Section 2

Subsection 2(a) directs the Secretary of Energy to carry out, in accordance with the provisions of the Act, a high level radioactive waste management demonstration project at the Western New York Nuclear Service Center in West Valley, New York, for the purpose of demonstrating solidification techniques which can be used for preparing high level radioactive waste for disposal.

Subsection 2(a)(1), requires that the Secretary shall solidify, in a form suitable for transportation and disposal, the high level radioactive waste at the Center by vitrification or by such other technology as the Secretary may, in his discretion, prescribe.

This subsection then defines the scope of the program to include the solidification of the high-level liquid radioactive waste which presently exists at the site as the result of the reprocessing activities which were conducted at the facility during the course of its commercial operation from 1966 through 1972. The Secretary is given the discretion to select the appropriate technology for solidifying these wastes, and is directed to solidify the waste in a form which is suitable for transportation and disposal. Thus, the technology selection process is to be based not simply in converting liquid wastes to a solid form, but is instead to be also directed towards identifying a waste form which will not only be capable of facilitating their anticipated transportation from the site and their ultimate disposal in a licensed Federal repository, but also be capable of complying with applicable regulatory requirements for the transportation and disposal of these high-level radioactive wastes.

Under Subsection 2(a)(2), the Secretary is directed to develop containers suitable for the permanent disposal of the high level radioactive waste solidified at the Center.

By including as part of the program the requirement that the Secretary design and construct containers suitable for the permanent disposal of the solidified waste, the scope of the project is expanded to include the development of containers which are suitable for the ultimate disposal of the waste which are solidified as a part of the project. As these containers will eventually be placed in a licensed repository, the Committee expects that the Secretary will develop these containers in a manner which complies with all applicable requirements of the Nuclear Regulatory Commission. The Committee further expects that the Secretary will consult the Nuclear Regulatory Commission at each stage in the design and construction of these containers to insure that such containers comply with all regulatory requirements and would be suitable for placement and a licensed repository.

Subsection 2(a)(3) directs the Secretary, as soon as feasible, to transport in accordance with applicable provisions of law, the

waste solidified at the Center to an appropriate Federal repository for permanent disposal.

This subsection clarifies the intent that the project is to include the transportation of the solidified wastes, and directs the Secretary to arrange for the actual transportation of the solidified waste from the site to an appropriate Federal repository as soon as practicable. Although the Secretary is given the responsibility to arrange for the transportation of the waste, the actual transportation of the waste must be in accordance with all applicable provisions of law, meaning that any privileges or immunities which may be available or which may otherwise apply because this would be an action of the Secretary, would not apply in this instance because the Secretary is merely acting as an agent for the licensee and the owner of the waste. Transportation of such waste would then be subject to all laws and regulations in the same manner and to the same extent as the transportation of any other licensed commercial waste. This subsection does impose upon the Secretary the responsibility for assuring that suitable containers are available for the transportation of the solidified waste and for assuring that, if the solidified waste cannot be shipped at the termination of the solidification activities because an appropriate Federal repository is not yet in operation, there exist at the site suitable facilities for storing the waste until such time as shipment is possible.

Subsection 2(a)(4) directs the Secretary to, in accordance with applicable licensing requirements, dispose of low level radioactive waste and transuranic waste produced by the solidification of the high level radioactive waste under the project.

As the project will generate additional quantities of low-level radioactive waste and transuranic contaminated waste, the Secretary will be expected to dispose of such waste as part of the project. However, the Committee expects that the project will encompass only those portions of the site and those facilities directly related to the solidification activities, and not include the existing state and NRC licensed burial grounds which are presently located at the site. These would then remain under the exclusive jurisdiction and control of the licensee and any disposal of the low-level waste and transuranic waste in these burial grounds would then have to comply with all applicable licensing and regulatory requirements. Although the Committee anticipates that the licensee will make these facilities available for the disposal of low-level and transuranic waste generated in the course of the project, the Committee is aware that there are questions as to the continued suitability of these facilities for such purposes, and therefore expects that the owner and the appropriate regulatory bodies will promptly review the condition of these burial grounds to determine if they are suitable for continued use for this purpose and, if not, to take appropriate action to establish suitable on-site burial grounds. Under no circumstances does the Committee expect high-level radioactive waste and highly contaminated waste to be disposed of on site, and notes that nothing in this Act would authorize the disposal or burial of such waste on site.

Under subsection 2(a)(5), the Secretary shall decontaminate and decommission (A) the tanks and other facilities of the Center in which the high level radioactive waste solidified under the project was stored; (B) the facilities used in the solidification of the waste;

and (C) any material and hardware used in connection with the project, in accordance with such requirements as the Commission may prescribe.

This subsection defines the project to include the decontamination and decommissioning of all facilities, equipment, hardware, and materials used in the course of the project, and adds the additional requirements that any decontaminated and decommissioning activity be specifically subject to such requirements as the Nuclear Regulatory Commission may prescribe. As the facility and those portions of the site used in the course of the project would revert to the exclusive control of the licensee at the conclusion of the project, the licensee would then be responsible for all costs which would be incurred in eliminating any violations which were not corrected prior to the termination of the project. The Committee believes that the cost of correcting any violations or acts of non-compliance which were a consequence of the activities conducted during the course of the project should be a part of the cost of the project, and not be imposed exclusively on the licensee. Thus, the project will not be considered to be terminated under the Commission has decided that the Secretary has, to the extent practicable, utilizing the most appropriate technology available, performed the decommissioning and decontamination activities in the manner which complies with all applicable requirements.

The Committee expects that the Secretary will conduct the decontamination and decommissioning activities at the earliest practicable opportunity so that, if one portion of the facility or site is no longer needed for the project, that portion will be decontaminated and decommissioned before the project itself is complete, unless the Secretary determines that it would be more cost effective to decontaminate and decommission a large portion of the facility or site at a subsequent date.

Subsection 2(b) directs the Secretary, before undertaking the project and during the fiscal year ending September 30, 1981, to (A) hold in the vicinity of the Center public hearings to inform the residents of the area in which the Center is located of the activities proposed to be undertaken under the project and to receive their comments on the project; (B) consider the various technologies available for the solidification and handling of high level radioactive waste taking into account the unique characteristics of such waste at the Center; (C) undertake detailed engineering and cost estimates for the project, and prepare a plan for the safe removal of the high level radioactive waste at the Center for the purposes of solidification and include in the plan provisions respecting the safe breaching of the tanks in which the waste is stored, operating equipment to accomplish the removal, and sluicing techniques, (D) conduct appropriate safety analyses of the project, and (E) prepare required environmental impact analyses of the project.

The Committee expects that the Secretary will afford interested members of the public every opportunity to participate in a meaningful manner at each stage of the process and that such public hearings will provide a useful forum for addressing public concerns. The purpose of the remaining portions of this subsection is to direct the Secretary to formulate the plans for solidifying the waste and obtain more reliable estimates of the project's cost so they can be incorporated into the budget and authorization process.

The Committee expects that, in implementing this program, the Secretary will fully comply with all the requirements of the National Environmental Policy Act.

Subsection 2(b)(4) directs the Secretary to enter into a cooperative agreement with the State of New York in accordance with the provisions of the Federal Grant and Cooperative Agreement Act of 1977, under which the state will perform certain actions. Specifically, the agreement is to provide that the state will make available to the Secretary the high-level radioactive waste and the facilities at the Center which are necessary for the completion of the project, and for such period of time as may be required for completion of the project, subject to the requirement that, in making such waste and facilities available, title to such waste and facilities shall not transfer to the Federal government. Nothing in any agreement reached between the Secretary and the State of New York will affect the authority of the Secretary to make all final decisions regarding the conduct of the program.

The purpose of this provision is to establish a mechanism by which the Secretary can utilize the wastes and facilities at the Center for the purposes of performing the authorized activities without assuming title to or responsibility for such wastes or facilities. Presently, the legal responsibility for the proper maintenance of these facilities and for the disposal of the high-level wastes rests with the licensees, and the Committee intends that nothing in this Act alter or relieve these parties of their legal responsibilities or authorize the transfer of such responsibilities to the Federal government. The Committee expects that, at the conclusion of this project, the licensee will be in exclusive control of the site and be solely responsible for monitoring and maintaining the site, and any responsibility of the Federal government will terminate, and the prohibition on the transfer of title to the Center or any portion thereof is consistent with this objective. Moreover, the transfer of title to the high-level radioactive wastes will be governed by such conditions as may be established in subsequent legislation, including the payment of a disposal fee. By retaining title to the high-level radioactive wastes, the State of New York then retains the responsibility for paying this fee, and the Committee does not intend that the payment of this fee be considered a part of the project's cost. This would then leave the State of New York in the same position regarding the responsibility for payment of this disposal fee as if the authorized activities had not occurred, and this is consistent with the intent of this Committee.

The bill also requires that the cooperative agreement provide that the Secretary provide technical assistance to the state in the preparation of the required license amendment application. This provision recognizes that the Western New York Nuclear Service Center is already a facility licensed by the Nuclear Regulatory Commission, and that any activity performed on the site would be subject to the conditions and limitations contained in the existing license. As the present license does not authorize any waste solidification activities, the license will have to be amended. The State of New York and Nuclear Fuel Service are presently co-licensees, and the Committee expects that both will fully cooperate in obtaining the required amendments. The Committee recognizes that the Nuclear Regulatory Commission has the authority to consider this ap-

plication according to such procedures as it deems appropriate, and nothing in this Act abrogates the statutory authorities of the Commission to rule upon the appropriateness of the requested amendment or any terms or conditions as may be included in such amendment. However, it is the intent of the Committee to place the primary responsibility for submitting the required application upon the State of New York, and to place the Secretary in a supportive position.

The agreement is also to contain a provision committing the State of New York to providing 10 percent of the project costs. The Secretary is to be responsible for determining the total project cost, and may, in calculating the state's contribution, include non-cash contributions as a part of the state's payment. Thus, the total project cost may be greater than the combined cash contributions of the Federal government and the State of New York, and in calculating the State's 10 percent contribution, the Secretary may include the cost of any non-cash contributions provided by the state. However, in determining the value of any non-cash contribution, the Committee expects the Secretary will use some fair market pricing evaluations. For example, if the state has title to the facilities, and makes them available to the Secretary for use in performing the activities authorized under this bill, the Secretary is to consider the value of the facilities in their present condition and in the context of renting property in the area, and not on the basis of the cost of constructing new facilities which may be needed for the project were the existing facilities not available. Moreover, if the state does not have title to the facilities, then the use of such facilities cannot be considered as a part of the state's contribution unless the state is paying for the use of such facilities, in which case the value of the contribution would be equal to the charge paid by the state. This Committee fully expects that the state's contribution will not consist entirely of in-kind contributions, and that the state will make substantial cash payments. While the state may make such cash contributions from the perpetual care fund, the Committee expects that the state will consider that such funds were to be used for the long-term maintenance and monitoring of the site, and recognize its continuing responsibility for such activities at the termination of the project, together with the responsibility for paying the disposal fee for the high-level radioactive wastes. Under no circumstances is the value of the use of the reprocessed high-level waste to be calculated as a part of the state's contribution and any cash contribution from the state is not to be provided from Federal funds obtained through other programs.

Subsection 2(c) directs the Secretary, within one year from the date of the enactment of this Act, to enter into an agreement with the Nuclear Regulatory Commission to establish arrangements for review and consultation by the Commission with respect to the project.

Under subsection 2(c)(1), the Secretary shall submit to the Commission, for its review and comment, a plan for the solidification of the high level radioactive waste at the Center, the removal of the waste for purposes of its solidification, the preparation of the waste for disposal, and the decontamination of the facilities to be used in solidifying the waste. In preparing its comments on the plan, the Commission shall specify with precision its objections to any provi-

sion of the plan. Upon submission of the plan to the Commission, the Secretary shall publish a notice in the Federal Register of the submission of the plan and of its availability for public inspection, and, upon receipt of the comments of the Commission respecting a plan, the Secretary shall publish a notice in the Federal Register of the receipt of the comments and of the availability of the comments for public inspection. If the Secretary does not revise the plan to meet objections specified in the comments of the Commission, the Secretary shall publish in the Federal Register a detailed statement for not so revising the plan.

Subsection 2(c)(2) directs the Secretary to consult with the Commission with respect to the form in which the high level radioactive waste at the Center shall be solidified and the containers to be used in the permanent disposal of such waste.

Subsection 2(c)(3) further directs the Secretary to submit to the Commission safety analysis reports and such other information as the Commission may require to identify any danger to the public health and safety which may be presented by the project.

Subsection 2(c)(4) states that the Secretary shall afford the Commission access to the Center to enable the Commission to monitor the activities under the project for the purpose of assuring the public health and safety.

The relationship between departments and agencies is always delicate, and, therefore, the Committee believes that it would be mutually beneficial for the involved parties to enter into a formal agreement establishing a frame work for their relationship so that subsequent disputes can be avoided. The purpose of subsection 2(c) is to require the establishment of such an agreement for the purpose of this project and to include in the legislation the essential features of any such agreement. The Committee believes that the establishment of this relationship is of such importance that it should be a statutory requirement. However, the Committee does not intend that the provisions of this bill encompass the entirety of the agreements, and recognizes that there are numerous other issues which should be included, and leaves to the Department and the Commission the responsibility for deciding what is appropriate. While the bill requires that the agreement be reached within one year of the date of enactment, it is the Committee's expectation that the Department and the Commission will give priority to their efforts in regard to this project and that the agreement will be executed as soon as practicable. Moreover, the Committee wishes to emphasize that the purpose of this subsection is to establish a mechanism for communication, and not define the legal scope of the relationship between the Department and the Commission. The Committee fully recognizes that the Department's activities at the West Valley site will raise unprecedented legal issues, in that the Western New York Nuclear Service Center is a facility which is presently licensed by the Nuclear Regulatory Commission, and that the activities authorized under this Act will require an amendment to the existing license. The Committee is aware that ultimately the Commission must determine the appropriate procedures for considering this application for an amendment, and, if it deems it appropriate, for approving an amendment subject to such terms and conditions as the Commission believes are in accord with its existing statutory authority. The Committee wishes to further emphasize

that nothing in this bill restricts or expands the Commission's statutory authority either to license high-level radioactive waste facilities or to fully protect the public health and safety and common defense and security.

Subsection 2(d) directs the Secretary, in carrying out the project, to consult with the Administrator of the Environmental Protection Agency, the Secretary of Transportation, the Director of the Geological Survey, and the commercial operator of the Center.

The intent of this subsection is to insure that the Secretary consult with all appropriate parties concerning the activities authorized under this Act. It is not the Committee's intent that the parties listed be the exclusive ones consulted by the Secretary, and wishes to stress that those designated are to comprise a minimal list, and not an exhaustive one. The Committee expects that the Secretary will actively consult other interested parties.

If the Commission determines that any activity of the Secretary under the project or the failure of the Secretary to take specified actions under the project presents a danger to the public health and safety, under subsection 2(e)(1), the Commission is directed to issue an order directing the Secretary to cease such activity or to take such actions, and if the Commission determines that any activity proposed to be undertaken by the Secretary under the project may present a danger to the public health and safety, the Commission shall issue an order directing the Secretary to not undertake such activity.

Under subsection 2(e)(2), if the Commission issues, an order under paragraph (1), it shall publish the order in the Federal Register, give notice of a public hearing on the order, and, as soon as practicable, hold such hearing. Upon completion of the hearing, the Commission shall affirm, revise, or rescind, as appropriate, the order with respect to which the hearing was held.

Subsection 2(e)(3) states that the Secretary may not conduct any activity which is prohibited by an order of the Commission in effect under this subsection and shall take such actions as may be required by an order in effect under this subsection.

The purpose of subsection 2(e) is to reaffirm the role of the Nuclear Regulatory Commission as the Federal agency responsible for protecting the public health and safety and vest it with the independent authority for so acting in regard to the actions of the Secretary in implementing the provisions of the bill. This authority is independent of any existing authority the Commission may have under existing statutes and is also independent of the Commission's authority to consider the application for an amendment to the existing license to authorize the performance of this project. Clearly any action which presents a danger to the public health and safety should be terminated, and it is the Committee's intent to reaffirm that the Commission is the principal Federal agency which is most capable of exercising this responsibility. It is the Committee's intent that this authority be independent of any agreement between the Department and the Nuclear Regulatory Commission.

Section 3

Subsection 3(a) authorizes to be appropriated to the Secretary for the project not more than \$5,000,000 for the fiscal year ending September 30, 1981. The Committee is aware that the total estimated

cost of this project is between \$250,000,000 and \$500,000,000 and intends that additional funding be providing through the normal authorization process.

Under subsection 3(b), the total amount obligated for the project by the Secretary shall be 90 per centum of the costs of the project. This subsection commits the Federal government to provide 90 percent of the total project cost. Because part of the state's contribution may be provided in services or non-cash expenses, the Committee is aware that the actual cash contributions of the Federal government may exceed 90 percent of the cash outlays, and the Committee intends that the Federal cash contribution exceed 90 percent. In calculating this 90 percent Federal contribution, the Secretary is to consider all the costs of the project, including both cash and non-cash services and expenses provided by the State of New York, and then provide 90 percent of all the costs incurred in conducting the project.

Subsection 3(c) directs that the authority of the Secretary to enter into contracts under this Act shall be effective for any fiscal year only to such extent or in such amounts as are provided in advance by appropriation Acts.

Section 4

Section 4 provides that no later than February 1, 1981, and on February 1 of each calendar year thereafter during the term of the project, the Secretary shall transmit to the Speaker of the House of Representatives and the President pro tempore of the Senate an up-to-date report containing a detailed description of the activities of the Secretary in carrying out the project, including agreements entered into and the costs incurred during the period reported on and the activities to be undertaken in the next fiscal year and the estimated costs thereof.

Section 5

Subsection 5(a) states that other than the costs and responsibilities established by this Act for the project, nothing in this Act shall be construed as affecting any rights, obligations, or liabilities of the commercial operator of the Center, the State, or any person, as is appropriate, arising under the Atomic Energy Act of 1954 or under any other law, contract, or agreement for the operation, maintenance, or decontamination of any facility or property at the Center or for any wastes at the Center. Nothing in this Act shall be construed as affecting any applicable licensing requirement of the Atomic Energy Act of 1954 or the Energy Reorganization Act of 1974. This Act shall not apply or be extended to any facility or properly at the Center which is not used in conducting the project.

Under subsection 5(b), the Federal government is not authorized under this Act to acquire title to any high level radioactive waste at the Center or to the Center or any portion thereof. This subsection then clarifies that nothing in this Act authorizes the Federal government to acquire title to either the high-level radioactive waste at the Center or the Center itself or any portion thereof. The Committee recognizes that ultimately the Federal government will acquire title to the high-level radioactive wastes, in that the disposal of such waste is a Federal responsibility. However, resolution of the issue as to when title to high-level radioactive waste transfers

to the Federal government has not yet been addressed in legislation, and the Committee does not believe it appropriate to resolve this issue in the context of this legislation and defers resolution of this question until such time as the issue is addressed on a generic basis in a more comprehensive bill.

Section 6

This section directs that within one year from the date of the enactment of this Act, the Attorney General of the United States shall complete a study to determine the identity of, and the legal responsibility which, any person, other than the United States or the State, may have under any law or rule of law for the decontamination and decommissioning of the Western New York Service Center in West Valley, New York. The study shall be conducted without regard to the project prescribed by section 2(a). The Attorney General shall publish the results of such study, provide copies thereof to the Congress, as promptly as practicable following the date of the completion of the study, and based on such study, shall to the extent he deems it appropriate and in the public interest, take such action under any provision of law to require payment by such person of all or any part of the costs incurred by the United States under the project for decontamination and decommissioning.

Section 7. Definitions

Section 7 defines the terms used in the Act. Under section 7(1), the term "Secretary" means the Secretary of Energy. Subsection 7(2) defines the term "Commission" to mean the nuclear Regulatory Commission. Under section 7(3), the term "State" means the State of New York. Subsection 7(4) defines the term "high level radioactive waste" to mean the high level radioactive waste which was produced by the reprocessing at the Center of spent nuclear fuel. Such term includes both liquid wastes which are produced directly in reprocessing, dry solid material derived from such liquid waste, and such other material as the Commission designates as high level radioactive waste for purposes of protecting the public health and safety. Thus, under this definition, the project encompasses only the high-level radioactive wastes which presently exist at the site and would not include any high-level radioactive wastes which was generated elsewhere and which is stored at a place other than the site at the time this legislation is enacted into law.

Under subsection 7(5), the term "transuranic waste" means material contaminated with elements which have an atomic number greater than 92, including neptunium, plutonium, americium, and curium, which have a half life greater than 5 years, and which are in concentrations greater than 10 nanocuries per gram, or in such other concentrations as the Commission may prescribe to protect the public health and safety. Subsection 7(6) defines the term "low level radioactive waste" as radioactive waste not classified as high level radioactive waste, transuranic waste, or byproduct material, as defined in section 11 e. (2) of the Atomic Energy Act of 1954. Under subsection 7(7), the term "project" means the project prescribed by section 2(a). Subsection 7(8) defines the term "Center" to mean the Western New York Service Center in West Valley, New York.

COST ESTIMATES AND COMPARISON—CONGRESSIONAL BUDGET ACT
INFORMATION

The Congressional Budget Office (CBO) has provided the Committee the letter printed below pursuant to Section 403 of the Congressional Budget Act of 1974 (CBA).

Congressional Budget Office cost estimate

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, D.C., September 10, 1980.

Hon. HARLEY O. STAGGERS,
Chairman, Committee on Interstate and Foreign Commerce, U.S.
House of Representatives, Rayburn House Office Building,
Washington, D.C.

DEAR MR. CHAIRMAN: Pursuant to Section 403 of the Congressional Budget Act of 1974, the Congressional Budget Office has reviewed H.R. 6865, the West Valley Demonstration Project Act, as ordered reported by the House Committee on Interstate and Foreign Commerce, August 27, 1980.

The bill authorizes the Department of Energy (DOE) to demonstrate the solidification of high-level liquid nuclear waste at the Western New York Center at West Valley, New York. The project must include the development of canisters for waste disposal, transportation of the solidified waste to a federal disposal site, and decontamination and decommissioning of facilities used in the project. DOE is required to enter into a cooperative agreement with the State of New York that establishes federal access to the site and confirms state financing of 10 percent of the cost.

In addition to DOE's responsibilities, the bill requires the Nuclear Regulatory Commission to review the project plan, to monitor DOE's activities, and to order the cessation of any action that in the Commission's view may threaten public health and safety. Further, the Attorney General of the United States is directed to complete a study within one year of enactment of the bill to determine the legal responsibility of other persons for the decontamination of the site.

The bill authorizes the appropriation of \$5 million for the project in fiscal year 1981, which is the same amount requested by the President for 1981. Under the assumption that all funds authorized will be appropriated by early in fiscal year 1981, estimated outlays would be \$3.3 million in fiscal year 1981 and \$1.7 million in 1982. The outlay estimate is based on the current spending pattern of DOE's West Valley program and on the Department's 1981 plan for continuing preliminary activities to manage the project.

Based on preliminary information from the Department of Energy, the total cost of the project during the period 1982-1993 is estimated to be over \$300 million, with the federal government paying 90 percent of this cost. NRC oversight responsibility is expected to cost approximately \$4 million between 1981 and 1992, including contractual work averaging \$180,000 per year beginning in 1984. The Department of Justice study to determine the legal responsibility for the decontamination of the site is estimated to cost approximately \$40,000 in fiscal year 1981. Because of uncertainty about the filing or outcome of any lawsuit by the United States to

recover all or part of the clean-up costs, this estimate does not include receipts that could be collected as the result of such legal action.

Should the Committee so desire, we would be pleased to provide further details on this estimate.

Sincerely,

Alice M. Rivlin, *Director.*

COMMITTEE OVERSIGHT FINDINGS AND RECOMMENDATIONS

No oversight findings and recommendations pursuant to Clause 2(1)(3)(A) Rules XI, under the authority of Rule X, Clause 2(B)(1) of the Rules of the House of Representatives are included, in addition to those comments and views contained elsewhere in this report.

Committee on Government Operations

No findings or recommendations on oversight activity pursuant to Clause 2(B)(2), Rule X, and Clause 2(1)(3)(D) of Rule XI of the Rules of the House of Representatives have been submitted to this Committee by the Committee on Government Operations for inclusions in this report.

AGENCY VIEWS

At the time of the filing of this report, the Committee had received the following response to its request to the Nuclear Regulatory Commission with respect to the bill:

U.S. NUCLEAR REGULATORY COMMISSION,
Washington, D.C., August 20, 1980.

HON. HARLEY O. STAGGERS,
*Chairman, Committee on Interstate and Foreign Commerce,
U.S. House of Representatives, Washington, D.C.*

DEAR MR. CHAIRMAN: This is in response to your request for the Nuclear Regulatory Commission's (NRC) views on H.R. 6865 as recently amended, a bill which would authorize the Department of Energy to carry out a high-level liquid nuclear waste management demonstration project at the Western New York Service Center in West Valley, New York. The NRC supports initiation of this project to solidify high-level waste at West Valley and agrees that to the extent federal agency involvement would assist this project, the Department of Energy (DOE) is the appropriate organization to conduct this project. DOE, through its contractors, is the only federal organization with the requisite technical resources to perform the detailed engineering and development work for retrieving, solidifying, and disposing of the high-level liquid wastes at West Valley. Therefore, the Commission supports these aspects of H.R. 6865. However, the amendment recently accepted by the committee raises some problems which are described below.

1. Section 2(b)(3)(D) would authorize the Secretary of Energy to conduct activities which he determines to be appropriate for the protection of public health and safety. This provision could create an overlap of jurisdiction by the NRC and DOE and could lead the Secretary to take actions inconsistent with evaluations by the NRC. Accordingly, the Commission recommends that this section

be amended to require the Secretary to consult with the NRC before taking such actions.

2. We interpret Section 2(b)(3)(C) as preserving NRC's authority regarding wastes of military origin currently at West Valley and which will be solidified by DOE. In our view, these wastes are not related to any military programs for the purpose of Pub. L. 96-164, and, thus, the NRC is not prohibited from expending funds to regulate DOE's receipt and storage of these wastes. The Commission supports Section 2(b)(3)(C) if it is intended to make unambiguous this NRC authority.

With regard to the NRC, the bill would require the Secretary of Energy to consult with the NRC in carrying out the project, and would preserve any application licensing requirements of the Atomic Energy Act of 1954 or the Energy Reorganization Act of 1974. The Commission's views on these matters are described in the attached correspondence.

The Commission appreciate this opportunity to express its views. If you have further questions on these matters, the Commission will be pleased to provide further assistance.

Sincerely,

JOHN F. AHEARNE.

SUPPLEMENTAL VIEWS

H.R. 6865 provides for a Federal demonstration of vitrification, a technique for solidifying liquid nuclear waste into a glass-like form. The project is to take place at West Valley, New York. This site was selected because it once was an active commercial reprocessing center where spent nuclear fuel was "reprocessed" or recycled. That reprocessing, much of which was done under contract for the U.S. defense program, produced high-level liquid nuclear waste which is still being stored at the West Valley site. Vitrification will solidify that waste leaving it less volatile than in its liquid state. The project will thus achieve greater safety for the West Valley site and help resolve the problem of nuclear waste by demonstrating the vitrification technique domestically.

Although vitrification is a proven technology which is commonly used in Europe, we have not employed it in this country. This legislation, H.R. 6865, corrects this long noticed oversight. We commend the Committee for recognizing the need to demonstrate vitrification.

We feel, however, that several points about the project need to be emphasized. The purpose for enacting this legislation is to continue the viability of nuclear power as an energy source. By firmly addressing the disposition of nuclear waste we can clearly show that the back end of the nuclear fuel cycle can be safely closed. We are pleased that even those who oppose the use of nuclear power have joined with us to resolve the problem of nuclear waste disposal.

This legislation is not intended to "bail out" the State of New York through a Federal give-away program. The State of New York remains obligated under all applicable laws for the West Valley site. The Federal government has no obligation to take any action at that site.

It must be recognized, however, that the Federal demonstration project at West Valley will bring benefit to the State. There is no quid pro quo required by the legislation. We understand, however, that negotiations continue between the State of New York and the U.S. Department of Energy on the future of the site. We expect that those negotiations will fully reflect the benefits of H.R. 6865.

We also understand that the State of New York contemplates the reopening of its low level waste burial grounds. We commend the State for this and hope that those burial grounds will soon be in operation again.

Because H.R. 6865 represents a major first step towards demonstrating the technology which will be used in the permanent disposal of nuclear waste, we support this legislation.

JAMES T. BROTHILL.
SAMUEL L. DEVINE.
CLARENCE J. BROWN.
NORMAN F. LENT.
EDWARD R. MADIGAN.
MATTHEW J. RINALDO.
DAVE STOCKMAN.
TOM CORCORAN.
GARY A. LEE.
TOM LOEFFLER.
TIM LEE CARTER.
WILLIAM E. DANNEMEYER.

○